

Operating instructions

LNT 250/150/D



Equipment designation:	LNT 250/150/D
Unit number:	2104104
Procedure number:	2343
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POWER SUPPLY LNT 250

SHORT DESCRIPTION

This 250 Watt laboratory power pack is designed in the form of a switched-mode regulator. The secondary filter ensures very low interference voltage.

Output is by means of laboratory safety sockets. Voltage and current can be adjusted continuously between 0 - final value.

MERKMALE

- ➔ Permanently short-circuit proof
- ➔ Power output max 250W
- ➔ Thermal protective circuit
- ➔ High efficiency
- ➔ Low residual ripple
- ➔ Low residual ripple
- ➔ Can be switched in parallel

Technical data

Input		General information	
Input voltage	230V AC	Protective device	Overvoltage protection
Overvoltage protection	VDR 275V		
Network failure time	> 20 ms		
Starting current	12A	Storage temperature range	-30°C + 85°C
Soft start	existing	Operating temperature range	-20°C + 50°C
Output		Load reduction	ab 40°C 2,5%/°K
Maximum output	250 W	Weight	ca. 4,75kg
Continuous output	200 W	Dimensions	42TE 3HE T2
Output voltage	0 - 100% adjustable	Connection	Protective contact plug 230V safety laboratory sockets
Output current	see table		
Residual ripple	< 1%		
System deviation	+/- 1%	Regulations	EN60950/ EN61000-3.2
Overvoltage protection	VDR		
Short-circuit current	see table		
Current limiting	0 - 100% adjustable	Protective class	II
Output voltage accuracy	0,5% during nominal input voltage	Radio interference class	Klasse B EN55022
		Typical efficiency	ca. 80 – 90%
Short circuit duration	Permanent		

Typ/Order nos.

0 - 15V / 0 - 4A	LNT250/15
0 - 30V / 0 - 8A	LNT250/30
0 - 60V / 0 - 4A	LNT250/60
0 - 120V / 0 - 2A	LNT250/120
0 - 250V / 0 - 1A	LNT250/250

Options/Order no. Suffix

Analogue measuring instrument	/A
Digital instruments	/D
Sensor	/F
Many course potentiometer	/V
Interface analogue 0 -10V/DC	/S

Technical subject to change.
No adhesion for misprint.

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Designation	Assembly	Function
1.	Digitally measuring instrument	Voltage: 0 - 150V
2.	Digitally measuring instrument	Current: 0 - 1,6A
3.	Switch	On and off
4.	Drehknopf	Voltage range
5.	Red socket	Plus output
6.	Black socket	Minus output
7.	Rotary knob	Current

Operation in detail

1. Digitally measuring instrument for voltage 0 - 150V
2. Digitally measuring instrument for current 0 - 1,6A
3. Mains switch for switching device on and off
4. Rotary knob for voltage: voltage range: 0 - 150V.
5. Red socket: plus output
6. Black socket: minus output
7. Rotary knob for current: current range: 0 - 1,6A.

Note: output voltages over 50V can be dangerous for people.
 The operating staff must be instructed accordingly.
 Cooling and ventilation slots must not be covered.

Current and voltage regulation

Voltage is kept constant up to the maximum current which is set. This voltage value is adjustable with the voltage potentiometer. If maximum current is reached, the current is kept constant with the current potentiometer and depending on loading the output voltage is reduced.

Network supply

The device is only designed for operation with 230V +/-10% alternating voltage (50-60Hz). Other supply voltages are not implemented in this variant.

Cooling

The cooling slits of the device may not be covered (danger of overheating).

Connection

Laboratory safety sockets are only safe if the corresponding connector is used. If standard connectors (4mm) are used, extra care must be taken.

Sensor (Option)

Sensors serve to compensate for external voltage drops in the power supply. This occurs in a linear fashion up to 0.5V per power line, and limited between 0.5 - 1V (partial compensation). Sensors are protected for a short time against load peaks. However, external users should not be supplied with current via the sensors on any account.

Live parts can be revealed if covers are opened or parts removed, except when it is possible to do this manually. Connector components can also be live.

If it is necessary to open the device for adjustment purposes or for maintenance or repairs, the device must be disconnected from all power sources.

If following this, adjustment, maintenance or repair have to be carried out when the device is open and live, the work may only be carried out by a specialist who is aware of the risks involved.

It must be ensured that only fuses of the specified type and rating are used as replacements. Only original spare parts may be used.

If it can be assumed that it is no longer possible to operate the device without danger, it must be decommissioned and secured against unauthorised or unintentional use.

Please contact Bürger Electronic if it is necessary to make a repair.

In case of transportation damage, please note:

Check the consignment immediately for damage and completeness! Make sure that no parts remain in the packaging and are lost as a consequence.

Have any damage to the goods or packaging confirmed on the waybill or delivery note by the carrier immediately (rail, post, haulage company etc.).

If damage is only discovered when the parts are unpacked, leave the goods in the condition in which they were when the damage was discovered. Make a complaint immediately to the postal service, rail freight or road haulage company and ask for the damage to be assessed.

The assessment must take place:

- Within 24 hours for the postal service,
- Within 7 days for rail freight,
- Within 4 days in the case of haulage companies which carry out final delivery of rail freight,
- Within 6 days in the case of vehicle transport carried out by freight carriers or haulage contractors.

Please retain all the packaging material in order to record the damage and have the following at hand:

1. Transportation documents, such as waybill, copy of express freight card or similar
2. Certificate of damage of the transportation company

As the consignee, you are entitled to compensation for damage which occurs during transportation, therefore you should make the application yourself.

We offer the legally-specified guarantee on the device supplied for us. The official starting date for the guarantee period is the date of invoice. However, the guarantee does not apply in case of accident, negligence, improper use, non-observance of the operating conditions, non-observance of the operating, test and service instructions or if repairs are made without the authorisation of Bürger Electronic or if the device is used in a manner which is not approved by Bürger Electronic. Bürger Electronic shall not be liable for indirect damage and reserves the right to decide on the suitability of rework or exchange of the device.

Please retain the invoice and guarantee card!

If any defects occur before or after the end of the guarantee period, please send the device to us.

- Send devices in suitable packaging, in the case of heavy devices, please send in double packaging.
- Enclose the invoice and a copy of the delivery note.
- Enclose the guarantee card, completely filled in.
- Please describe the defect precisely.

Guarantee card

Device: laboratory power pack

Type: LNT250/150/D

Date of purchase:

Invoice No.:

Name, First name:

Street:

Postcode and location:

Telephone:

Description of defect:

☐

Repair under guarantee

☐

Chargeable repair:

Repair up to €.....
above this amount, please send
an estimate